Substitute Form PTO-1449	U.S. Department of Commerce Patent and Trademark Office	Attamey's Docket No. 17601-019001	Application No. 10/003,917	
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TRADE	Other Documents (include Author, Title, Date, and Place of Publication)				
Examiner Initial	Desig. ID	Document			
4	C7	Eric R. Skonberg and Hugh W. O'Donnell, "Horizontal Drilling for Underground Coal Gasification," presented at the Eighth Underground Coal Conversion Symposium, Keystone, Colorado, August 16, 1982 (8 pages)			
	C8	Gamal Ismail, A.S. Fada'q, S. Kikuchi, H. El Khatib, "Ten Years Experience in Horizontal Application & Pushing the Limits of Well Construction Approach in Upper Zakum Field (Offshore Abu Dhabi)," SPE 87284, Society of Petroleum Engineers, October 2000 (17 pages)			
	C9	Gamal Ismail, H. El-Khatib – ZADCO, Abu Dhabi, UAE, "Multi-Lateral Horizontal Drilling Problems & Solutions Experienced Offshore Abu Dhabi," SPE 36252, Society of Petroleum Engineers, October 1996 (12 pages)			
	C10	C.M. Matthews and L.J. Dunn, "Drilling and Production Practices to Mitigate Sucker Rod/Tubing Wear-Related Failures in Directional Wells," SPE 22852, Society of Petroleum Engineers, October 1991 (12 pages)			
	CII	H.H. Fields, Stephen Krickovic, Albert Sainato, and M.G. Zabetakis, "Degasification of Virgin Pittsburgh Coalbed Through a Large Borehole," RI-7800, Bureau of Mines Report of Investigations/1973, United States Department of the Interior, 1973 (31 pages)			
V	C12	William P. Diamond, "Methane Control for Underground Coal Mines," IC-9395, Bureau of Mines Information Circular, United States Department of the Interior, 1994 (51 pages)			

Examiner Signature		123/26
EXAMINER: Initials citation considered. Draw line through citation if no next communication to applicable	t in conformance and not con	
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	U.S. Patent Documents						
Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
1	Al	4,651,836	03/24/1987	Richards			
	A2	4,776,638	10/11/1988	Hahn			
	A3	5,148,877	09/22/1992	MacGregor			
	A4	5,287,926	02/22/1994	Grupping			
	A5	5,355,967	10/18/1994	Mueller et al.			
	A6	5,775,443	07/07/1998	Lott			
1	A7						
Q.	A8						

Foreign Patent Documents or Published Foreign Patent Applications								
Examiner	Desig.	Document	Publication	Country or			Trans	lation
Initial	ID ID	Number	Date	Patent Office	Class	Subclass	Yes	No
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	B3							
	B4							
	B5							

Other Documents (include Author, Title, Date, and Place of Publication)				
Examiner Initial	Desig.	Document		
4	CI	PowerPoint Presentation entitled, "Horizontal Coalbed Methane Wells," by Bob Stayton, Computalog Drilling Services, date is believed to have been in 2002 (39 pages)		
	C2	Denney, Dennis, "Drilling Maximum-Reservoir-Contact Wells in the Shaybah Field," SPE 85307, pages 60, 62-63, October 20, 2003		
	C3			
	C4			

Examiner Signature	Date Considered
	1/27/26
EXAMINER: Initials citation considered. Draw line through citation if no next communication to applicant.	
	Substitute Disclosure Form (PTO-1449)

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<u> </u>	Other Documents (include Author, Title, Date, and Place of Publication)					
Examiner Initlal	Desig. ID	Document				
A	C8	Themig, Dan, "Multilateral Thinking," New Technology Magazine, December 1999, pages 24-25				
	C9	Smith, R.C., et al., "The Lateral Tie-Back System: The Ability to Drill and Case Multiple Laterals," IADC/SPE 27436, Society of Petroleum Engineers, 1994, pages 55-64, plus Multilateral Services Profile (1 page) and Multilateral Services Specifications (1 page)				
	C10	Notification of Transmittal of the International Search Report or the Declaration (PCT Rule 44.1) (3 pages) and International Search Report (4 pages) re International Application No. PCT/US 03/13954 mailed September 1, 2003				
	CII	Logan, Terry L., "Drilling Techniques for Coalbed Methane," Hydrocarbons From Coal, Chapter 12, Cover Page, Copyright Page, pp. 269-285, Copyright 1993				
	C12	Hanes, John, "Outbursts in Leichhardt Colliery: Lessons Learned," International Symposium-Cum- Workshop on Management and Control of High Gas Emissions and Outbursts in Underground Coal Mines," Wollongong, NSW, Australia, March 20-24, 1995, Cover page, pp. 445-449				
	C13	Williams, Ray, et al., "Gas Reservoir Properties for Mine Gas Emission Assessment," Bowen Basin Symposium 2000, pp. 325-333				
	C14	Brown, K., et al., "New South Wales Coal Seam Methane Potential," Petroleum Bulletin 2, Department of Mineral Resources, Discovery 2000, March 1996, pp. i-viii, 1-96				
L	CIS	Fipke, S., et al., "Economical Multilateral Well Technology for Canadian Heavy Oil," Petroleum Society, Canadian Institute of Mining, Metallurgy & Petroleum, Paper 2002-100, to be presented in Calgary Alberta, June 11-13, 2002, pages 1-11				

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Examiner Signature		Date Considered	
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Application No. 10/003,917

Information Disclosure Statement by Applicant (Use several sheets if necessary) Applicant Joseph A. Zupanick et al.

Filing Date

Group Art Unit 3673

(37 CFR §1.98(b))

November 1, 2001

			U.S. Pate	ent Documents			
Examiner Initial	Desig. ID	Document Number	Publication Date :	Patentee	Class	Subclass	Filing Date If Appropriate
7	A28	6,646,441 .	11/11/2003	Thompson et al.		•	
T	A29 .	6,668,918	12/30/2003	Zupanick			·
	A30	6,679,322	01/20/2004	Zupanick			
1	A31	6,688,388	02/10/2004	Zupanick		•	·
	A32	6,708,764	03/23/2004	Zupanick			
	. A33	6,722,452	04/20/2004	Rial et al.		٠.	
	A34	6,725,922	04/27/2004	Zupanick .	· .		
	, A35	2002/0074122	06/20/2002	Kelley			
	A36	2003/0164253 A1	09/04/2003	Trueman et al.			
	. A37	2003/0221836 A1	12/04/2003	Gardes		·	
	A38-	2004/0033557 A1	02/19/2004	Scott et al.			
	A39	2004/0045719 A1	03/11/2004	Moore et al.			
	. A40	2004/0060351 A1	04/01/2004	Gunter et al.			

	Foreign	Patent Docu	iments or P	ublished Foreign I	Patent A	Application	ns '	
Examiner Initial	Desig.	Document Number	Publication Date	Country or Patent Office	Class	Subclass	Translat	ion No
6	BI	CA 2,210,866	01/19/1998.	Canada			x	<u></u>
	B2	CA 2,278,735	01/13/1998	Canada			X.	
	В3	CH 653741 A5	01/15/1986	Switzerland			Abstract Only	
	B4	GB 2 255 033 A	10/28/1992	United Kingdom		•	N/A _.	
	B5	WO 01/44620	06/21/2001	WIPO .			N/A	
2	B6	WO 98/35133	08/13/1998	WIPO .		·	N/A	Ŀ

Other Documents (include Author, Title, Date, and Place of Publication)					
Examiner	Desig.				
Initial	ID_	Document			
T	Ci	Stayton, R.J. "Bob", "Horizontal Wells Boost CBM Recovery," Special Report: Horizontal and Directional Drilling, The American Oil and Gas Reporter, August 2002, pp. 71-75			
		I Day Outside and			

Examiner Signature

Date Considered

1/27/06

EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Substitute Disclosure Form (PTO-1449)

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1	losure Statement	Applicant Joseph A. Zupanick et al.		
		Filing Date . November 1, 2001	Group Art Unit 3673	

	U.S. Patent Documents							
1	Frantiner Initial	Desig. \ ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
/	JK 5 2006	Al	Re. 32,623	03/15/1988	Marshall et al.			
	HAT I TO	A2	6,581,455 BI	06/24/2003	Berger et al.			
14	JK JK	A3	6,581,685 B2	06/24/2003	Burgess et al.			
	JK	A4	2003/0234120 A1	12/25/2003	Paluch et al.			

Foreign Patent Documents or Published Foreign Patent Applications								
Examiner	Desig.	Document	Publication	Country or			Trans	slation
Initial	ID	Number	Date	Patent Office	Class	Subclass	Yes	No
JK	ВІ	WO 03/036023 A1	05/01/2003	WIPO			N/A	

(Other D	ocuments (include Author, Title, Date, and Place of Publication)
Examiner Initial	Desig. ID	Document
JK	Cl	Notification of Transmittal of the International Preliminary Report of Patentability (1 page) and International Preliminary Report on Patentability (12 pages) mailed January 9, 2006 for International Application No. PCT/US2004/036616
JK	C2	Notification Concerning Transmittal of Copy of International Preliminary Report on Patentability (Chapter 1 of the Patent Cooperation Treaty) (1 page), International Preliminary Report on Patentability (1 page), and Written Opinion of the International Searching Authority (7 pages) mailed December 22, 2005 for International Application No. PCT/US2004/017048
JK	C3	European Search and Examination Report, completed December 5, 2005 for Application Number EP 05020737, 5 pages
JK	C4	P.C. Thakur and W.N. Poundstone, "Horizontal Drilling Technology for Advance Degasification," Society of Mining Engineers of AIME, Preprint Number 79-113, For presentation at the 1979 AIME Annual Meeting, New Orleans, Lousiana, February 18-22, 1979, Engineering Societies Library stamp dated February 5, 1980, 11 pages.
JK	C5	Notification Concerning Transmittal of Copy of International Preliminary Report on Patentability (1 page), International Preliminary Report on Patentability (1 page), and Written Opinion of the International Searching Authority (5 pages) mailed February 9, 2006 for International Application No. PCT/US2004/024518
JK	C6	Wang Weiping, "Trend of Drilling Technology Abroad," Petroleum Drilling and Production Technology, 1995 (Volume 17), Issue 6, www.cnki.net , 8 pages
JK	C7	Tver, David, The Petroleum Dictionary, 1980, page 221.
JK	C8	Rennick, et al., "Demonstration of Safety Plugging of Oil Wells Penetrating Appalachian Coal Mines," Bureau of Mines Coal Mine Health and Safety Research Program, Technical Progress Report – 56, U.S. Department of the Interior, July 1972, 25 pages
JК	C9	George N. Aul and Joseph Cervik, "Grouting Horizontal Drainage Holes in Coalbeds, RI 8375, Bureau of Mines Report of Investigations, U.S. Department of the Interior, 1979, 21 pages

Examiner Signature	/John Kreck/	(06	Date Considered /13/2006)
EXAMINER: Initials citation co		n if not	in conformance and not considered. Include copy of this form with

Substitute Form PTO-1449 (Modified)	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 17601-019001	Application No. 10/003,917	
	losure Statement plicant	Applicant Joseph A. Zupanick et al.		
(Use several sheets if necessary)		Filing Date November 1, 2001	Group Art Unit 3673	

	Other Documents (include Author, Title, Date, and Place of Publication)					
Examiner	Desig.					
Initial	ID	Document				
JK	C10	Paul J. Componation, et al., "Cleaning Out, Sealing and Mining Through Wells Penetrating Areas of Active Coal Mines in Northern West Virginia," MESA Information Report 1052, 1977, 26 pages				
JK	C11	George S. Rice, "Notes on the Prevention of Dust and Gas Explosions in Coal Mines," Technical Papter 56, Department of the Interior Bureau of Mines, copyright 1913, 12 pages				
JK	C12	George S. Rice, et al., "Oil and Gas Wells Through Workable Coal Beds," Bulletin 65, Petroleum Technology 7, Bureau of Mines Internal Industries, copyright 1913, 54 pages				
JK	C13	Pratt, et al, U.S. Patent Application entitled "Cavity Well System," S/N 11/141,335, May 31, 2005, 19 pages				

Examiner Signature	Date Considered				
/John Kreck/ (06/13/2006)					
EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with					